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MEMOIR of a CHART

of the

BAY of BENGAL,

Published at the Expence of the United East India Company:

in 1772, by

Dalrymple.

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SECOND EDITION.

LONDON:

Printed by GEORGE BIGG, 1787.

TO THE HONOURABLE

THE COURT OF DIRECTORS

OF THE

UNITED EAST-INDIA COMPANY,

IN FEBRUARY 1772,

JOHN PURLING, Eſq; being *Chairman*,

GEORGE DUDLEY, Eſq; *Deputy*.

DIRECTORS,

Richard Boſanquet, Eſq;
Sir James Cockburn, Baronet
George Cuming,
Peter Ducane, Junior,
Henry Fletcher,
Robert Gregory,
John Harriſon,
Joſeph Hurlock,
William James,
John Manſhip,
John Michie,
Frederick Pigou,
John Roberts,
Henry Savage,
Joſhua Smith,
Laurence Sulivan,
Harry Verelſt,
Edward Wheeler,
Daniel Wier,
John Woodhouſe,
} Eſquires

THIS WORK

Undertaken in purſuance of their *Encouragement*,

AND

Executed at the Expence of the Eaſt-India Company,

IS INSCRIBED BY

The Company's old and faithful Servant,

ALEXANDER DALRYMPLE.

March 31, 1772.

MEMOIR OF A CHART
OF THE
BAY OF BENGAL.

IT muſt appear very extraordinary, when it is conſidered how long the *Europeans* have had an intercourſe with *Bengal*, that there is not hitherto a *particular* Chart of the *Bay* of *Bengal* publiſhed in any language.

The Honourable Thomas Howe deceaſed, in the year 1763, after the action with a French Frigate in which he ſo gallantly defended his ſhip, went to the Coaſt of *Orixa*; in his paſſage from thence to *Bengal* he had an opportunity of correcting the Chart of this Coaſt in the *Neptune Oriental*: and having reduced to a *general Scale* all the particular Charts in his poſſeſſion of the Coaſts, &c. in the *Bay* of *Bengal*, he connected them together in the beſt manner he could.

Soon after my return to England, in 1765, Mr. Howe gave me a Copy of his Chart; and encouraged me to reviſe and improve it from what materials I had collected: accordingly I ſet about this work and reduced the Coaſt of *Orixa* to a ſcale of 3 Inches to 1°.—the *Original*, at firſt only intended as a correction of the Neptune Oriental, being ſomewhat more.

Plaiſted's Survey of the *Coaſt* of *Chittagong*, ſerved, both in Mr. Howe's Chart and mine, for the deſcription of that Coaſt; but I added, from other authorities, ſome Banks remote from the Land.

The Coaſt of *Ava*, from *Negrais* to *Chedube*, I laid down from various materials; but here I found ſo great a diſagreement in the Latitudes, even where I was aſſured *all proper allowances* had been made, that I deſiſted from my intention of having the Chart engraven: however Capt. William Smith and I examined ſeveral Journals at the India-Houſe, and laid down many *ſoundings* in the tracks acroſs the Bay.

Copies of this Chart were given to ſeveral perſons, amongſt others to Capt. Mears and to Capt. Court, who, on their return laſt Year, teſtified the higheſt approbation of it, particulary concerning the *ſoundings* about *Falſe Point* and *Point Palmiras.*

On mentioning their ſentiments to the Honourable Mr. Howe, in his laſt illneſs, and ſhewing him the copy which the Eaſt-India Company had permitted me to take of the *late ſurvey* of the *Coaſt of Bengal*, he very ſtrongly recommended to me to publiſh this Chart, from an opinion that it would be very uſeful to the Company's Ships, and alledged that my objection, concerning the latitudes, was not of weight, as a proper caution might be given on that head.

Not long ſince, in converſation with Mr. Purling, the Chairman of the Court of Directors, ſaying that I would be at the trouble of engraving this Chart, if the Company would be at the expence, I was induced, from the ſentiments he

then

then expreſſed, to ſend him, ſoon after, a paper of propoſals for his peruſal, this he communicated to the Court of Directors, who inſtructed their Secretary to write me a letter encouraging me to execute this work.

When I drew up the propoſals I only thought of adding the *new ſurvey* to my Chart, and publiſhing it in that ſtate; and had not indeed ſeriouſly weighed the matter, as it was only a private converſation; but, when I received the Company's letter, it became a ſubject of publick attention, and it occurred to me that, although this Chart was the *beſt* I knew of the *Bay of Bengal*, it was capable of amendment; and therefore that it was inconſiſtent with my own credit, and an unbecoming return to the ready encouragement given by the Company, to publiſh it in its then form; for although it was well enough as a MS Chart, yet a Chart preſented to the *Publick* ought to be as compleat as materials will admit.

On mentioning this to Mr. Purling, and obſerving that it would be neceſſary for me to *new draw* the whole, he ſaid what I alledged was juſt, and that he was convinced, as he at firſt told me, that it would coſt much more than I reckoned; but that the Gentlemen of the Direction approved of it greatly, as they thought it would be very uſefull, and therefore begged me to go on with it, and be aſſured that the Company would defray the expence.

The very handſome manner in which Mr. Purling behaved on the occaſion has a claim, not only to my acknowledgement, but to that of the Publick, as to him, they are, in good meaſure, indebted for this Chart.

It was at firſt propoſed to have engraved the Chart on two plates, comprehending the *Bay* with the *Coaſts* of *Ava*, *Orixa*, &c. from 16° N, but on more mature conſideration I have been induced to make *one* plate from 19° N, comprehending *both Coaſts*: the Coaſts to the Southward of this Latitude are the leaſt material, but will take moſt time and trouble to lay down, which would retard the publication; the preſent limit comprehends the extremity of the *Bank of Soundings*; the former plan, of carrying the Chart down to 16° N, would have rendered it of an inconvenient ſize, when the two plates were united, and have occaſioned a great *blank* by the *open ſea* between the *Coaſts of Ava and India*: which Coaſts may, with more propriety, be engraven by themſelves, ſhould the materials for deſcribing them be found ſufficiently compleat for forming Charts worthy the attention of the Publick.

I have here given the *Hiſtory of this Chart* from its firſt formation; and ſhall now particulary explain the various materials from which it was laid down in the ſtate it now appears.

The poſition of *Calcutta*, in 22° 34′. 43″N. and in 88° 33′ 15″E Long. fr. Greenwich, is from the obſervations of the Honourable Mr. Howe; the Latitude taken by an aſtronomical Quadrant made by Mr. Bird,

1764, March { 4th - - - 22° 34′. 40″. } N.
{ 6th - - - 22. 34. 46. }

The Longitude deduced from an Emerſion of Jupiter's 1ſt Satellite on the 6th March 1764.

The

The Situation of *Iſlamabad*, in 22° 20′. N Latitude, 91° 45′. E Long. fr. Greenwich, was deduced by the *Aſtronomer Royal* from the Obſervation, made there, of the Tranſit of Venus in 1761.

The difference of Longitude between *Calcutta* and *Iſlamabad* by theſe *obſervations* 3° 11′. 45″. is ſcarcely a mile different from the *late ſurvey*, ſo that it may reaſonably be preſumed theſe places are exactly determined.—At the ſame time I do not mean to inſinuate that any two aſtronomical Obſervations can be confided in for the determination of ſo ſmall a diſtance as a mile.

Theſe are the *only* obſervations I have of the Longitudes taken *aſhoar*.

Ganjam Flagſtaff is in 19° 25′ N Lat. 85° 17′ E Long. by obſervations of ☉ and ☾ taken in September 1770 by Mr. Mears, Chief Mate of the Egmont; Mr. Howe places *Ganjam* in 19° 22′. 30″ N which is 2′. 30″. more to the ſouthward. And, by the diſtance from the *Falſe Point*, in 85° 6′ E Longitude, which is only 11′ different from the Longitude obſerved by Mr. Mears; I have laid it down by Mr. Howe's Chart. Having copied the Coaſt, from *Ganjam* to the *Flat ſandy* Pt. near the *Black Pagoda*, from that Chart.

From *this Point* to the *Falſe Point* I have made a deviation from the *Chart*, to inſert a plan of *Podgon* or *Codgoné*, communicated by Mr. Herbert, this Plan was made by W. Helman 1742. The *Iſland* at the *Wn. Extremity of this Bay* is called, in the plan, the *Falſe Point*, but, as the Land trends away to the Eaſtward, this would be entirely incompatible with the

Survey from P^t. *Palmiras* to *Falſe Point:* which *Survey* alſo deſcribes *Falſe Bay* quite differently from *Helman*'s plan of *Godgoné*, of which place I have ſome other ſketches and memorandums ſimilar to the Plan. The *double Bank* in Mr. Howe's Chart pointed out to me the poſition of *Codgoné*; the *W^n. Sand* being (as I ſuppoſe) off *Helman's Falſe P^t.* (which I ſhall call *Codgoné P^t*) the *E^n. Sand* off the *Falſe P^t.* of the *Survey*; Mr Howe's Latitude of *Falſe P^t.* being ſomewhat more *ſoutherly* than the Land is deſcribed in the *Survey*, I have continued the *Land* to Mr. Howe's Latitude; a memorandum in Helman's plan confirms the alteration I have made, by inſerting *Codgoné* in this place, for he ſays, ſpeaking of ſome *Trees* laid down in his plan,[a] " Theſe bearing N. you " have *ſoft* ground," which bearing is *juſt clear* of Mr. Howe's *W^n. Sand* and correſponds to the *mud gap* he deſcribes, which it is very natural to expect as the *River* of *Cuttack* falls into this *bay*.

The inſertion of *Codgoné Bay* carries the Land from *Falſe Point* more *Weſterly* than in Mr. Howe's Chart, and, conſequently, the Land from the *Black Pagoda* more *Northerly* than Mr. Howe deſcribes it; this is very conſonant to the *Neptune Oriental*.

The *Survey* ſent to the Company from Bengal bears the name of John Ritchie, but, it is ſaid, great part of it was made by Plaiſted: It is not accompanied with any explanaion; it has been reduced, and this reduction implicitly followed from *Falſe Point* to *Chittagong*; but the *Coaſt* of *Chittagong* appearing to be taken, not from Plaiſted's *Survey*, but from his *firſt* ſketch,

[a] Vid. 1 in Chart,

ſketch,[b] I have prefered *Plaiſted*'s Survey in 1761, to *this Part* of the *New Chart:* however I have added ſome dangers omitted by *Plaiſted*; it is to me very obvious, that the dangers on this Coaſt are very far from being yet exactly deſcribed.

I have added the River to Calcutta, and traced the other Channels up from their mouths.—My intention, in tracing the rivers, was to point out the direction of the *Stream*, that Ships may avoid it, or take the advantage of it, according to circumſtances.

I find the *Tails* of the *Sands*, at the Mouth of *Bengal River* in the SURVEY, by no means conformable to the Journals of Ships; ſhould I hereafter publiſh the Chart of the Coaſt of *India*, I may perhaps make it comprehend the *Sands* laid down from the Journals, which would be uſeful as a caution.[c]

The *Eaſt ſide* of the Bay, to the Southward of *Red-Crab Iſland*, having been lately *ſurveyed*, I thought it would be improper to inſert this *Coaſt* in the Plate, till the *Survey* is received; I ſhall therefore make a particular Plate of it from the bearings and obſervations I have met with, and in this Plate the Soundings from the *Coaſt* of *Arrackan* to the *Swatch*, or *Gut* of *no ground*, will be inſerted: it will be on the ſame ſcale and is intended to be paſted to the Chart now publiſhed.[d]

Since

[b] By a letter from Capt. Ritchie, I am aſſured he did not take this Coaſt from any Chart made by Plaiſted, but laid it down from his own obſervations; I have ſince publiſhed the various particular, and, I may add, diſcordant Plans of this Coaſt. *D*

[c] This Work has never been compleated. *D*

[d] Vide the various particular Plans of this Coaſt ſince publiſhed ſeparately. *D*

Since this Memoir was printed I have received from the India-Houſe a *Chart* of the *Bay* and *River* of *Bengal*, by Philip Parſons, 1743-4: in this Chart *Codgoné Bay* is, in figure, little different from Helman's plan; but N in that, is E in Helman's: Parſons ſays the river (marked 3 in the Chart) "vents near the *Black Pagoda*," this it would do according to the direction Helman gives it; but Parſons's Chart makes the Mouth of it a *little* to the *Southward* of *Codgoné Point*, or, what he calls, the *Falſe Point*; ſeveral other notes in Parſons's Chart are equally contradictory to the *bearings* in his *chart*, though theſe notes are very conſonant to Helman's bearings; Parſons ſays, "theſe Trees bearing N. [vide 1 in chart] you'll be "in *ſoft mud*," which *bearing* in his chart leads over the *gravelly bank*;—again he ſays, "this Tree [vide 2 in chart] bearing N. "in 7 fath. *mud*, a WNW. courſe will carry you to the "River's Mouth;" whereas, by his chart, this Tree bearing N. is in *a line over the Land into the River*.—I therefore conclude Parſons has inſerted the Plan of *Codgoné Bay* erroneouſly, by aſſuming the *known bearings* of *Point Palmiras* and the *Falſe Point*, being miſled by *Codgoné Point* being named the *Falſe Point*.

My intention was to have accompanied this Chart with ſome Nautical Inſtructions and Obſervations; but I am not yet Maſter enough of the Subject to attempt any thing of this nature; and find it has already employed much more of my time and attention than I expected, or could conveniently beſtow: and although all *plain matters of fact* are *uſeful*, *ill-grounded* deductions may be *very prejudicial*.

Soho-Square,
16 Sept. 1772.

Dalrymple.